

Release Notes for October 15, 2020 Umler System Release

The Umler system release scheduled for Thursday, October 15, 2020, includes functional enhancements to Umler including modifications to business rules, elements, and permissible values within the application.

Below are the complete details of this release.

- **Element Updates (New Elements/Element Changes & Removals)**
 - Cushioning Unit Component ID (B361)
 - Component Element
 - Equipment Group(s): BOXC, GOND, HOPP, TANK, FLAT, IFLT, VFLT, MISC, PSGR
 - Presentation Group: Draft System
 - Description:
 - Component ID from Component Registry.
 - Remote Monitoring Device (B176)
 - Added element to LOCO equipment group
 - Equipment Group(s): LOCO
 - Presentation Group: Specification
 - Description:
 - Indicates the equipment is equipped with a location monitoring device.
- **Permissible Value/Range Updates - Updates/Removals/New Values**
 - Head Protection Type (A118)
 - Equipment Group(s): TANK
 - Updated Permissible Value Descriptions
 - Update permissible value 'C'
 - Current: No Head Shield, but Head Protection
 - New: Head Protection (other than Head Shield)
 - Update permissible value 'F'
 - Current: Full Shield
 - New: Full Height Head Shield
 - Update permissible value 'H'
 - Current: Half Shield
 - New: Half Height Head Shield
 - Update permissible value 'T'
 - Current: Trapezoid Shield
 - New: Trapezoidal Head Shield

- Stenciled Shipping Spec (A237)
 - Equipment Group(s): TANK
 - Added Permissible Values
 - 105J500H - Major Class 84 - DOT 105J500H
 - 105J600H - Major Class 85 - DOT 105J600H
 - 112J500H - Major Class 84 - DOT 112J500H
 - 112S500H - Major Class 84 - DOT 112S500H
 - 112S600H - Major Class 85 - DOT 112S600H
 - Updated Permissible Values
 - 105J500I - Major Class 84 - DOT 105J500I
 - 105J600I - Major Class 85 - DOT 105J600I
 - 112J500I - Major Class 84 - DOT 112J500I
 - 112S500I - Major Class 84 - DOT 112S500I
 - 112S600I - Major Class 85 - DOT 112S600I
- Head Protection Thickness (B105)
 - Equipment Group(s): TANK
 - Updated Permissible Range Minimum
 - Old - 0.5
 - New - 0.119
- Tank Major Class (B207)
 - Equipment Group(s): TANK
 - Added Permissible Values
 - 84 - Pressure Tank for TIH (HM-246)
 - 85 - Pressure Tank for TIH (HM-246)
- EPA Emissions Tier Level (B081)
 - Equipment Group(s): LOCO
 - Added Permissible Value
 - I - Tier 4C
- **Business Rule Changes - New/Changed or Updated/Removed Rules**
 - Head Protection Type (A118)
 - Equipment Group(s): TANK
 - Removed Rule(s):
 - Head Protection Type must be reported as C, F, H, or T if the 4th character of the Stencil Class is J, S, or T and the car was built on or after July 1, 1997
 - Head Protection Type must be reported as F, H, or T if the 4th character of the Stencil Class is J, S, or T and the car was built on or after July 1, 1997
 - Head Protection Type must be reported as C if the 4th character of the Stencil Class is J or S and the car was built on or after July 1, 1997
 - Head Protection Type (A118) must not be reported as C if the 4th character of the Stenciled Class Shipping Spec (A237) is T

- Added Rule(s):
 - If the 4th character of the Stencil Class is J or S and the car was built on or after July 1, 1997, Head Protection Type must be reported as C, F, H, or T
 - If the 4th character of the Stencil Class is T and the car was built on or after July 1, 1997, Head Protection Type must be reported as F, H, or T
- Added Note(s):
 - This element is used in determining if the tank car meets DOT117.
 - This element is used in determining if the tank car meets HM-246.
 - Permissible value C is a performance based head puncture-resistance system meeting 49 CFR 179.16(a).
 - Permissible value F is a prescribed head puncture-resistance system meeting 49 CFR 179.16(c)(1).
- Tank Major Class (B207)
 - Equipment Group(s): TANK
 - Updated Rule(s):
 - 41 - Removed 112J500I
 - 42 - Removed 112S500I and 112S600I
 - 94 - Removed 105J500I
 - 96 - Removed 105J600I
 - 84 - Added 112S500I, 105J500I, 105J500H, 112J500I, 112J500H, and 112S500H
 - 85 - Added 105J600I, 105J600H, 112S600I, and 112S600H
- Head Protection Thickness (B105)
 - Equipment Group(s): TANK
 - Updated Rule(s):
 - **Old:** If Tank Head Protection is F, H, or T then Head Protection Thickness is required
 - **New:** If Head Protection Type (A118) is F, H, or T then Head Protection Thickness must be greater than or equal to 0.5 inches
 - Added Rule(s):
 - If Head Protection Type (A118) is U, then Head Protection Thickness must not be reported
 - Added Note(s):
 - This element is used in determining if the tank car meets DOT117.
 - This element is used in determining if the tank car meets HM-246.
- Safety Relief Device (A230)
 - Equipment Group(s): TANK
 - Updated Rule(s):
 - **Old:** Tank Safety Relief Device Type is required for Tanks with a Built/Rebuilt (Birth) Date on or after July 1, 1997

- **New:** Safety Relief Device Type is required for Tanks with a Built/Rebuilt (Birth) Date on or after July 1, 1997
 - **Old:** Tank Safety Relief Device Type should be reported, if Safety Relief Device Count is reported
 - **New:** Safety Relief Device Type should be reported, if Safety Relief Device Count is reported
 - **Old:** Tank Safety Relief Device Type must be reported as Unequipped (U), when Safety Relief Device Count is reported as 0
 - **New:** Safety Relief Device Type must be reported as Unequipped (U), when Safety Relief Device Count is reported as 0
- Added Note(s):
 - This element is used in determining if the tank car meets DOT117.
 - This element is used in determining if the tank car meets HM-246.

○ Appendix N

- Added HM-246 Validation Matrix to

Minimum requirements for DOT105J500I, DOT105J600I, DOT112J500I, DOT112S600I, DOT112S500I, DOT105J500H, DOT105J600H, DOT112J500H, DOT112S600H, and DOT112S500H per 49 CFR §179.101 with additional requirements found in 179.102-3, 173.244, and 173.314.

A237	Stenciled Shipping Spec	DOT105J500I, DOT105J500H	DOT105J600I, DOT105J600H	DOT112J500I, DOT112J500H	DOT112S600I, DOT112S600H	DOT112S500I, DOT112S500H
B207	Tank Major Class	84	85	84	85	84
B204	Jacket Material Category	Must not be U	Must not be U	Must not be U	N or S or U	N or S or U
B541	Jacket Thickness >=	0.1196	0.1196	0.1196	0.1196 (if N or S) or Blank (if U)	0.1196 (if N or S) or Blank (if U)
A257	Tank Shell Material Spec =	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L
A258	Tank Shell Thickness >=	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)
B208	Tank Shell Material Norm	Y	Y	Y	Y	Y
A254	Tank Head Material Spec =	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L	128B or 302B or 51670 or 5371 or 240304L or 240316L
A255	Tank Head Thickness >=	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)	0.6875 or 0.5625 (if 128B)
B203	Tank Head Material Norm	Y	Y	Y	Y	Y
A118	Head Protection Type	F	F	F	F	F

*Indicates this is a new element.

B105	Head Protection Thickness >=	0.5	0.5	0.5	0.5	0.5
A264	Top Fittings Protection	R or S	R or S	R or S	R or S	R or S
A230	Safety Relief Device Type	C or V	C or V	C or V	C or V	C or V

Got Questions? Get Answers.

If you have any questions about Railinc's Umler system or this release, contact the Railinc Customer Success Center by email at csc@railinc.com or by phone at 877-724-5462.